NEW ENGLAND FARMER.

PUBLISHED BY J. B. RUSSELL, AT NO. 52 NORTH MARKET STREET, (AT THE AGRICULTURAL WAREHOUSE.)—T. G. FESSENDEN, EDITOR.

VOL. IX. BOSTON, WEDNESDAY EVENING, JUNE 1, 1831. NO. 46.

COMMUNICATIONS.

FOR THE NEW ENGLAND FARMER.

FORM OF A ROLLER.

MR FESSENDEN—Having lately seen two or more descriptions of Rollers in the Farmer, I will try to give you the description of one I lately saw in Lancaster County, Pa. at the farm of a friend of mine and which he says is the kind most approved of in parts of Chester County, Pa. A stick 6 feet long and from 20 to 36 inches in diameter is to be bored through with a 5 inch hole, then by placing blocks in each end find the centre of each hole and describe a circle on each end of the stick, as large as it will admit, from which dress it round and smooth, and then with a cross cut saw it in two which gives you two pieces of 3 feet each in length; next prepare a good piece of wood for an axis, dressed round, and $\frac{1}{4}$th of an inch less than the hole bored, and long enough to run through both pieces and secure in the frame with a tenon of 2 by $4\frac{3}{4}$ inches on each end; on one end is to be left a shoulder, inside of the tenon and on the other a piece of board as a washer to keep the roller clear of the frame in working. The frame consists of 2 pieces before and 2 behind, and one on each side; into the latter of which is put the axis after having the two parts of the roller and the washer put on. A tongue is secured to the two front pieces of the frame with stay chains to prevent strain in turning, and a sheath and rings for breast chains on the end, and a pin hole at the proper place for a double tree, but where oxen are used nothing but 2 pins near the end of the tongue is necessary, and no iron is used in the construction except the stay chains and sheath. A box for giving it additional weight or for gathering stones may be placed either over the top, or, as is often done, to lengthen the tongue, on the hind part of the frame. The advantage of having the roller in 2 pieces is, that it turns easier and without dragging the ground, as in a short turn the pieces move in opposite directions.

It is said to work admirably.—My friend told me that in cash laid out, his roller cost $3; the stuff he had of his own and took no account of hauling it. He had a carpenter $1\frac{1}{2}$ days whom he assisted and paid for also boring. If the foregoing description has not been already given and you think it will be of any use, you may publish it.

A PENNSYLVANIA SUBSCRIBER.

May 2, 1831.

BLIGHT IN PEAR TREES.

MR FESSENDEN—Much has been written in your useful paper on the subject of blight in pear trees.

I am not fully satisfied as to the causes of this blight—today I noticed that nearly one fourth of the upper extremity of one of my small pear trees had put out no leaves and was apparently dead. On close examination at the foot of the dead limb, a protuberance was discovered, nearly one inch in length, and so nearly of the color of the bark of the limb that it would not have been noticed but by the enlargement of the limb. This protuberance proves to be a worm, wrapped in a coat of mail, closely adhering to the wood.

The worm is alive. I send it, with the limb for your inspection. This worm has evidently caused the death of this shoot. Is not this the cause of blight in pear trees?

Yours respectfully, W. B.

Framingham, May 20, 1831.

Remarks by the Editor.—The limb of the pear trees, alluded to above, came to hand, but the insect had made its escape, and of course has evaded our observation. Blight is nothing more than another term for *withering*, or decaying suddenly; and whatever causes a fruit tree or other vegetable production to wither or *wilt* (as we express the drooping of a plant) is the cause of blight. Loudon says 'Blight is a common term for injuries received by the vegetable kingdom, when in a state of growth, which cannot be referred to any obvious or certain cause, and coming suddenly is said to give them the appearance of being blighted or blasted.' Some writers attribute the sudden decay of the pear tree, commonly call d blight, to the scorching rays of the sun. Others imagine that warm weather in winter, or early in spring, sets the sap in motion, which subesquent cold weather arrests, and causes it to stagnate, and become corrupt in the pores of the alburnum. Others are of opinion that manuring too high, and pruning too much causes the tree to die of surfeit. Then there is abundant proof that blight in pear trees is often caused by *scolytus pyri*, a small insect, first accurately described by the late Professor Peck, and often taken notice of in our Journal. In all cases of blight, the only cure or palliation yet discovered is found in sawing off the affected branch or branches some inches below where the blight, or marks of disease appear.

PEACH TREES.

MR FESSENDEN,—During the time I have paid attention to the cultivation of Peach trees, viz, since 1820, I have observed that young trees are liable to be stung on the body and limbs by an insect, often fatally. The appearance produced by the sting is the oozing out of a darkish greasy looking gum; on examination the stings can be traced quite into the alburnum, the inner bark being much discolored. On older trees in the spring and fore part of summer, tufts of dead leaves and fruit are seen through the trees, the twigs to which they are attached having been stung. Also the fruit when half grown or more, stung in many places, at first occasioning whitish spots, which if the fruit in a knotty state it does not outgrow, results in rot, accompanied with a bluish dusty mould, which on touching, occasions the speedy rotting of the adjoining fruit. Is all this occasioned by the sting of the same or different insects? I presume cultivators generally in the middle states must have observed it.—An answer in the Farmer from Dr Harris, yourself, or any other of your learned or practical correspondents or readers would be very acceptable, especially if it contain directions for preventing said depredations, which to me often proves a serious loss.

Your friend, A PENN. CULTIVATOR.

York County, (Pa.) May 2, 1831.

FOR THE NEW ENGLAND FARMER.

PLANTING TREES.

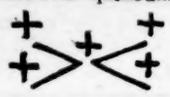
MR FESSENDEN—In the 6th vol. page 301, of the New England Farmer, I read a communication by Solomon Drown, M. D. recommending 'the ancient quincunxial mode of planting,' and having an orchard to plant the following spring, I concluded to dispose of the trees in that way. The piece contains near four acres, has two ravines meeting in it at an obtuse angle which renders it of little value for common farming purposes. The soil of middling quality and slaty. I commenced at the side where the hill was the steepest, and most extensive, and ran my rows of stakes so that in ploughing that face of the ravine, the plough would run in a horizontal direction, and continued row after row until the whole was finished, when on examining the faces of the other slopes I was surprised to find that in every case the rows were so disposed as to admit of the plough running in a horizontal direction between. Had this piece been laid out in squares, I do not see that it could have been ploughed at all; as it is, under the most favorable circumstances, it has cost the life of a valuable horse by a fall while ploughing one of its steepest faces. However the piece, containing 104 apple and 310 peach trees (now in a flourishing condition) has been ploughed and sown with grass seed, and in future it is my intention to cultivate the trees by digging around them, as I shall never again attempt to plough it.

This spring I have planted another piece of uneven shape and surface in the same manner, containing about 140 apple and three times as many peach trees. I plant my apple trees at 40 feet apart and between every two apple trees a peach, and again between every two rows of apple an entire row of peach at 20 feet apart, which, upon the peach trees failing and being cut away, will leave the orchard of apple trees at 40 feet apart.

I think this manner of planting is preferable to squares in every case, but more particularly where there is an unevenness of shape or surface in the piece to be planted. The beauty of this manner of planting consists, in part in each tree being the centre of a circle,* whose circumference contains six trees standing equi-distant therein and each of course equi-distant from the centre, thus forming within the circle a hexagon, three rhombs or diamonds, or six equilateral triangles, and thus throughout the orchard. By way of illustration I send you the annexed diagram. The figure *as extended*, exhibits a large circle inclosing a hexagon, the latter divided into three rhombs, viz, one composed of diamonds, one of triangles and one of circles and parts of circles, a square and larger rhomb is also shown, and the places marked for trees after the quincunx order, extended to the whole and shewing how each figure would be filled thereby. But there exists a difference of opinion respecting what constitutes the quincunx; several of our encyclopedias and dictionaries and one of your correspondents stating it to be what appears to be nothing more than squares reversed, while in the place before referred to is

*See Mr Drown's communication in N. E. Farmer, vol. vi. page 301.

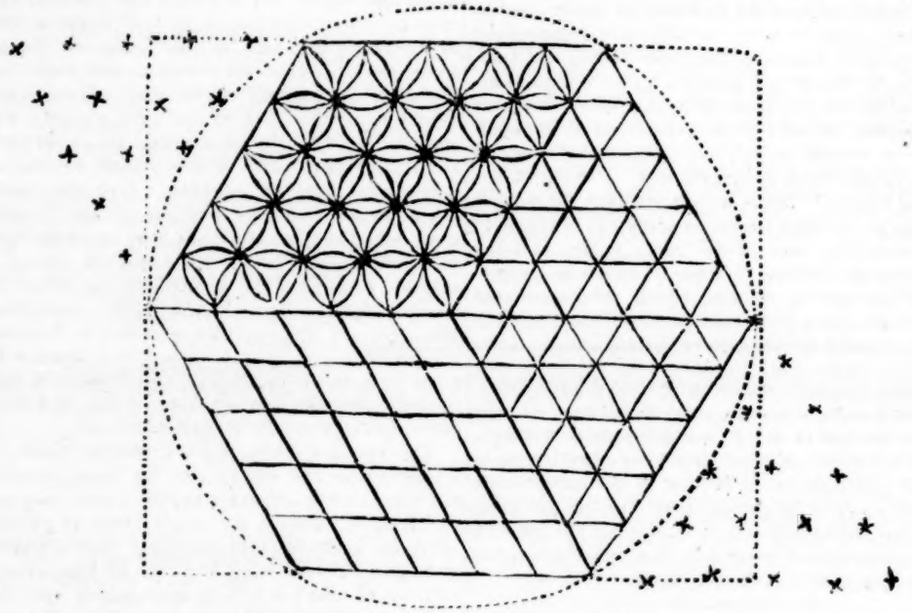
given what I suppose to be the real quincunx, viz, two letters V joined thus,



Where trees are to be planted in quincunx at 20 feet apart, I would recommend using two 20 feet poles, first running a straight line of stakes at 20 feet apart along one side, leaving sufficient room between the row of stakes and fence for a plough and horses to turn; then let the end of a pole be placed to the first stake and another to the second and the other ends of the poles be drawn together until they meet in the direction from the fence, where drive a stake; then place the poles to the 2d and 3d stakes, draw the ends together and drive another stake and so proceed till finished. If the piece is of uneven shape, nothing more is nesesary than to change the line to which the ends of the poles are placed and they will meet in any desired direction, as it is nothing more than laying out one equilateral triangle along side of another and repeating the same thoughout. It requires one person to each pole and another to draw the ends together and drive the stakes. Where it is desired to plant at 30 feet or further, chains or tape lines may be used instead of poles. Where stakes have got a little out of place, in proceeding with the work, I have found it disposed to correct itself; where the ground is not level care must be taken to hold the measures in a horizontal position in laying out.

If you think the foregoing or any part of it would be of use to any of your readers, you are at liberty to publish it. Your friend,

Wrightsville, Pa., April 15, 1831. M.



The following is a translation from the German Encyclopedia Dictionary, edited by Captain Pierer, Altenburg, 1829, and communicated for the New England Farmer by Doct. Lieber.

Lentil. 1. *in botany*, the genus *Ervum*. 2. *in gardening*, the common lentil, L. lens, comes from France and the Valais. The thin, annual root brings forth weak, creeping, hairy, angular stalks, from 1 to 2 feet long, divided from near the bottom into several branches, and clinging for support to other plants; the feathered leaves stand alternately; from the angles of the leaves proceed fine stalks which each have two or three whitish flowers, hanging down. The pods do not contain more than two sound seeds, flat upon both sides. 3. *in husbandry*, lentils are cultivated in the fields for the seeds just mentioned. They require a rather sandy yet strong soil; they are sown somewhat later than peas and vetches (in the middle of April), because they cannot endure night frosts; the soil is to be ploughed in narrow furrows and well harrowed; care is to be taken that the seed is not put too deep into the ground and that the young plants are well hoed and well weeded. For the harvest (generally in the middle of August) the precise time is to be chosen, when the little pods begin to turn brown though the plant may be still quite green, and, if possible, it is best to choose the afternoon of a dry warm day, for if the pods are quite ripe, or are wet with rain at the time of gathering they easily crack open, and a great loss of seed takes place. Two varieties are generally cultivated; *a*, the large garden lentil, *b*, the common field lentil; the former is distinguished by its size and the greater quantity of mealy substance which it will afford, but not by a better taste. The straw of lentils is good food for cattle and sheep, particularly for calves and lambs; lentils are also mixed with vetches and sowed as food both green and dryed for milch kine. 4. Nutriment. Lentils when cooked afford a nutritious food, (this should be done in the pod to preserve their flavor) but like peas and beans are not good for persons whose digestive powers are weak, particularly if they are not cooked quite soft. They ought to be cooked for two hours and a half: when they are browned, some butter and a few onions roasted in butter are added, also salt; they are then cooked half an hour more. A good soup may also be made of them. Some persons soften the lentils before cooking in cold water. Purified rain water is best to cook them in. In the Archipelago they are one of the principal articles of food. Formerly the meal of lentils, *(farina lentis)* was used by apothecaries. To fatten pigs, lentils are excellent; and given with other food increase the milk of cows.

Horticulture.

Proceedings of the Massachusetts Horticultural Society, at the Exhibition meeting, held at the Hall of the Institution on the 28th of May, 1831.

Report made by H. A. S. Dearborn, President of the Society.

On a recent occasion, I alluded to the meritorious services, which had been rendered, by several distinguished horticulturists, whose names are enrolled among the members of our Society, and in confirmation of the assertion, that their ardor had not abated, for the advancement of rural culture, I will read a communication from Sam'l. G. Perkins, Esq., on a new method of warming Green Houses, Vineries, &c.

Brookline May 24, 1831.

Gen. H. A. S. Dearborn,
Pres. Mass. Hort. Society.

Sir—Agreeably to my promise I have now the honor to submit to your consideration the result of my first experiment on the application of hot water in heating Hot Houses or Vineries.—I must however, premise, by observing that at the time this experiment was made, my house was unfinished; the west end, where a well is now built, where the reservoir is placed, was then entirely open; besides this there is an opening at the other end of the house directly over the boiler; of course there was a free current of air through the vinery which prevented me from ascertaining the degree of heat which the apparatus would give to the house when shut up.—This experiment was made on Friday evening last, 20th instant, when the mercury stood in the open air at 8 P. M. at 57 degrees—and the reservoir was entirely exposed, uncovered, to this temperature.

The boiler and reservoir are of cast iron, containing each about 80 gallons.—their diameter is about 3 feet, and their depth 22½ inches. The house is 80 feet long in which they stand, the boiler at the east, and the reservoir at the west end; of course the length of the pipes that connect them is about 74 feet. These pipes are introduced or open into the kettles as follows—viz. the upper edge of the upper pipe is within three inches of the top of the rim; and the under edge of the under pipe is a little below the perpendicular or straight line of the side of the kettle, which brings it (as the lower part of the kettle is somewhat dishing) within two or three inches of the bottom.

The pipes are of cast iron, 4¼ inches in diameter within the bore,—but the exterior of the pipe presents a surface of 16½ inches, making in the two pipes a surface of 33 inches.—These pipes are laid perfectly horizontal; of course when you fill your boiler you fill your reservoir in the same degree; the proper point when filled for operation being an inch above the upper edge of the upper pipe.—The pipes are computed to hold about 115 or 120 gallons of water, which together with that which is contained in the two kettles when filled to the proper height, say 140 gallons, makes 250 or 260 gallons of water to be heated, before the *full* effect of the apparatus can be experienced throughout the house.

At about 6 o'clock fire was put under the boiler with some light fuel; in half an hour the heat was sensibly felt in the end of the upper pipe next the boiler; at 7 o'clock the mercury stood in the boiler at 120,—and in the middle of the reservoir it stood at 96—but at the mouth of the upper pipe that opens into it, it rose to 100. At this time the upper pipe gave out considerable heat

at half past 7 o'oclock the mercury stood in the boiler at 144 and in the middle of the reservoir it stood at 116—but upon its being put to the mouth of the pipe it rose to 120.

The under pipe was now warm as far back as the centre towards the boiler. The top of the reservoir being open during the whole process of heating, you could see the movement of the hot water from the upper pipe into the reservoir after the boiler had attained the temperature of 120,—the heat of the lower pipe had increased so much that I was satisfied there was no difficulty to be apprehended, and being troubled with rheumatism, the evening air being cold, I left my gardener to watch its progress, and to report to me the next morning, which he did as follows:

Soon after I left him he went to his supper and found on his return the fire had burnt down, but was renewed and kept up until the temperature of the water in the boiler was 176, and that in the reservoir 156,—this was a little after 2 o'clock. the upper pipe was now very hot, and the lower one giving out heat throughout its whole extent. Soon after, the fire was allowed to go out, which it did very readily, as it was supported only by pine chips, and some half rotten chesnut posts that had been out of the ground a few days previous. The next morning at half past five, I found the temperature of the boiler, at 88; this, considering the open state of the house, and especially over the boiler, was higher than I expected to find it, particularly as the night air was quite cold.—Had the house been closed, it would have made a great difference in the temperature of the apparatus in the morning,—the water in the boiler would have been heated sooner, and of course that in the reservoir and the pipes would have been sooner in a state to communicate warmth to the house, had the cold air been excluded.

I think, when the house is closed at both ends, the boiler may be raised to 185 or 190 degrees in two hours, at which time a peck or a peck and a half of Lehigh coal will keep up the heat during the winter nights of Jan'y and Feb'y.—The objection to the large boilers is, the time taken to heat so large a body of water; but it must be recollected that during the whole time of its heating, it communicates a portion of its caloric to the house—first to that part nearest the boiler, and subsequently to the other end, as the heat increases in the reservoir; so that the fuel employed in heating is not lost entirely at any time; for long before the whole apparatus is heated, the temperture of the house will be found to have changed; indeed, *all* the heat which is communicated to the water must be given out again; and as it has no escape but into the house, the air or the temperature of the air therein, must be rising from the moment heat is felt in the boiler.

Another reason for preferring large boilers and large pipes to small ones is, first, that where a large body of water is heated, it takes a much longer time to cool it than it does to cool a smaller volume, during all which time it is giving out its heat into the house.—2. When a large body of water is heated, a small quantity of coal will keep up the heat, so that the gardener may retire to his rest in full confidence of finding his house in good heat in the morning,—in this point of view it has a great advantage over brick flues; as it frequently happens that gardeners are obliged to set up half the night to watch and renew their fires in the winter season, when their houses are heated by this means. Besides, brick flues cool very soon after the fire has gone down, whereas, a large body of hot water will continue to give out heat many hours after the fire is extinguished.

Another important advantage in heating with hot water is the saving of fuel;—a house 80 feet long requires two furnaces, and two flues, each 40 feet, to keep up an equal heat at both ends of the house; and it is difficult to heat these sufficiently with Lehigh coal, at their extremities.—Whereas by the hot water process you require but one furnace, and the whole consumption of coal must be much less in this, than in one of the furnaces attached to brick flues, because these, to be heated to any extent, require a strong draught, which of course consumes the fuel with rapidity; but when this fuel is applied to the heating of a kettle, set over a well and judiciously constructed fire-place and smoke flues, there is no waste or loss of fuel, as moderate draft only is required.

Another very important reason in favor of large boilers and large pipes is the extent of surface from which heat is given out into the house; and when compared with any single brick flue it is as 33 to 18; for instance, the pipes in my house each present a surface of 16 inches, making 33 inches surface together. Now the largest size tiles which are used here, at least the largest that I have seen, are 12 inches square; an inch on each side lodges on the brick, of course they present only a surface of 10 inches on the top, from which heat is given out freely.—Beside this there are 4 inches on each side of the flue, where the bricks stand edgewise; this added to the ten on the top makes 18 inches.—The pipes therefore present 83 per cent more surface than the flue, through which heat is communicated to the house, to say nothing of the surface of the top of the boiler, and the top and sides of the reservoir, which added to the pipes, would make 100 per cent in favor of the hot water system on the single point of medium through which the heat is communicated.

Under this view of the subject, I cannot but think that heating hot houses, vineries, &c, by the application of hot water is more efficacious, more certain and uniform, and more economical than heating by brick flues.

I shall, whenever my house is closed in, make another trial of the apparatus, and a further report on its effects, and in the mean time I remain respectfully,

Your obedient servant.

SAMUEL G. PERKINS.

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The very important discovery of distributing heat throughout the most extensive Green Houses, and Vineries, by the means of boiling water, is destined to have a very favorable influence, on the horticulture of all countries, situated beyond the tropics. In Great Britain, the experiment has been made with complete success, and we are much indebted to Mr Perkins for having made the apparatus known in this country, by a practical application, on a large scale. There cannot be a doubt, that hot water will be universally adopted, as a substitute for steam and hot air flues, to *heat* Green Houses and Vineries, while the former, will be combined with the apparatus, as the best mode of *irrigating* the foliage of plants, requiring protection.

It is understood that Col. T. H. Perkins, who is erecting a Peachery, Vinery and Green House within his magnificent grounds at Brookline, 280 feet in length, intends to heat the whole range with hot water, in the manner so successfully adopted by his brother. He has a Vinery 300 feet long, which was built some years since, warmed and irrigated by steam.

It is cheering to behold the rapid increase of Green Houses and Vineries, in all the beautiful villages which surround our capital. Within three years from fifteen to twenty have been erected, and others are in progress. While gentlemen of fortune thus embellish their country seats, practical gardeners find them profitable appendages to their establishments; as the sale of the flowers and fruits, which they are enabled to cultivate affords an ample remuneration for the expense of the edifices and the labor of superintending them.

Respectfully submitted, by

H. A. S. DEARBORN.
Pres. Mass. Hort. Soc.

Horticultural Hall,
Saturday, May 21, 1831.

This being the day appointed by the Committee for awarding the premium on Tulips, the number and beauty of the flowers exceeded that of any previous exhibition.

Fine specimens of tulips were exhibited by H. A. S. Dearborn, of Roxbury, Z. Cook, Jr, of Dorchester, John Prince, of Roxbury, P. B. Hovey, of Cambridgeport, S. Walker, of Roxbury, D. Haggerston, of Charlestown, Otis Pettee, of Newton, Rufus Howe, of Dorchester, Charles Lawrence, of Salem.

A branch of the double flowering hawthorn from the garden of John Prince, Esq. was particularly admired.

Rich bunches of Flowers from the gardens of Henry A. S. Dearborn, Z. Cook, Jr, and Charles Tappan.

From Otis Pettee of Newton, a fine specimen of double rose colored Paeony and Calla æthiopica. An Orange branch with fruit from E. G. Austin. P. B. Hovey exhibited many fine specimens of Ranunculus for premium.

Messrs Winships from the nursery at Brighton, exhibited a fine collection of hardy shrubs and herbaceous plants, including five distinct varieties of Lilac, and the beautiful shrub *Lonicera tartarica*, or upright Tartarian Honeysuckle. This variety of Honeysuckle is one of the most ornamental shrubs which can be introduced into a garden, being perfectly hardy, of vigorous growth, and covered at this season, with the most delicate and interesting pink flowers.

The standing Committee on Ornamental Trees, Shrubs and Flowers, award the premium on Tulips to Mr David Haggerston of the Charlestown Vineyard. R. L. EMMONS, *Chairman.*

May, 21 1831.

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MEMBERS ADMITTED MAY 21, 1831.

J. M. Brown,	*Boston.*
Edward Motley,	"
William W. Wheelwright,	"
Lot Wheelwright, Jr.	"
Amos Lawrence,	"
Joseph Russell,	"
Josiah Quincy, Jr.	"
Henry Sheafe,	"
John Gray,	"
Jacob Bender,	"
Ezekiel D. Dyer,	*Roxbury.*
George Read,	"

AGRICULTURE.

SYSTEMATIC ALTERNATIONS OF CROPS.

In the cultivation of the ground, either in farming or gardening, a proper attention to the regular rotation of crops forms one of the first and principal features of good management, although its beneficial influence has not yet been fully accounted for by chemists. The rationale of rotation is thus given by Sir Humphry Davy:—'It is a great advantage in the convertible systems of cultivation, that the whole of the manure be employed; and that those parts of it, which are not fitted for one crop, remain as nourishment for another. Thus, if the turnip be the first in order of succession, this crop manured with recent dung immediately finds sufficient soluble matter for its nourishment, and the heat produced by fermentation assists the germination of the seed, and the growth of the plant. If after turnips, barley with grass-seed be sown, then the land little exhausted by the turnip crop, affords the soluble parts of the decomposing manure to the grain. The grasses, rye-grass, and clover remain, which derive a small part only of their organized matter from the soil, and probably consume the gypsum in the manure, which would be useless to other crops; these plants, likewise, by their large system of leaves, absorb a considerable quantity of nourishment from the atmosphere, and when ploughed in, at the end of two years, the decay of their roots and leaves afford manure for the wheat crop; and at this period of the course, the woody fibre of the farm-yard manure, which contains the phosphate of lime, and the other difficult soluble parts, are broken down, and as soon as the most exhausting crop is taken, recent manure is again applied.'

Gardeners should pay particular attention to rotation of crops, as far as the nature of the thing will admit of; a good practice is to sow down part of the garden every season in grass, clover, and barley, which may be used as green food for horses and cows. The barley should be sown with the clover, and cut down, not being allowed to ripen; thus it acts as a nurse and a shade to the clover. But in all cases where this is done, let the ground be laid down in as good condition as possible, and the manure laid on will not be lost.—Land thus laid down should continue so for two years, or if for three, the greater will be the benefit. However, this is generally regulated by the quantity of ground which can be spared from crops, for the time when the ground is wanted. The crop of grass, if dug in, but not too deep, for reasons given already, will materially improve the soil; but on no occasion whatever trench it in, as is too often the case. This practice, although excellent, can however only be applied to gardens on a largeextent; for its adoption would not be attended with the same advantage in the general run of our gardens.

By a rotation of the perennial crops, such as quartering out currants, gooseberries, and raspberries, &c, the ground will not only be renewed, but also rested, or at least very much improved. None of these crops need occupy the ground above twelve years, and not less than three; this, together with trenching for the principal crops of autumn-planted brassica will keep the ground in fresh order, and be attended with no loss of space; for in all large gardens, and the generality of small ones, new plantations of these things should be made to a certain extent annually, which will throw a certain proportion of ground into regular rotation.

In cropping all gardens, as far as it can be rendered practicable, rotation should be aimed at, and thus, by keeping all the legumes, as peas and beans, the brassica or cabbage kinds, the bulbous or onion kinds, and lighter crops, as salads, &c, by themselves, each following in regular succession, the garden would not only look better, but would to a certain degree, produce the rotation required. In no case should any of the brassica tribe follow another upon the same piece of ground, neither should peas follow peas, nor beans, beans; onions are probably, the only exception in garden culture. A journal, or plan of the garden should be kept, and the ground divided into portions, each of which should be numbered and a careful record kept of all crops, manurings, trenchings, &c.

The necessity of rotation is pointed out to us by nature; for all perennial herbaceous plants have a tendency to extend their circumference, and to rot and decay at their centre, where others of a different kind, spring up and succeed them. This is particularly exemplified in the strawberry, and all such stoloniferous growing plants; mushrooms are said never to rise two successive years on the same spot. The production of the phenomenon, called fairy rings, has been ascribed to the power of the peculiar fungus, *(Agaricus orcades,)* which forms it, of exhausting the soil of the nutriment necessary for the growth of the species. —The consequence of which is, that the ring extends itself annually, as no seeds will grow where their parents grew before them; at the same time, that the interior of the circle has been exhausted by succeeding crops; but in those places, where the fungus has died, grass has grown luxuriantly, nourishment being thus left for the support of grass and other plants, after the agaricus has exhausted all that was destined by nature for its support.

All crops for a few years thrive well on newly turned up virgin mould, but in a few years they degenerate and require a fresh soil. Land, in the course of years, often ceases to produce the most common vegetables, and fields which are well laid down with cultivated grasses, lose every one of them in a few years; they become, as it were, tired of them, but the truth is, that they have exhausted the nourishment proper for their respective sorts, and consequently die, and give place to others. This fact is frequently experienced by botanists to their regret, for a plant is often found in abundance for years, in one field or wood, and in course of time wholly disappears.

From the general richness of garden-ground, and much manure being constantly employed in the raising of garden-crops, much less attention has perhaps been paid to the courses of cropping in the garden, than in the field. It is, however, equally necessary in one case as in the other, and the same principles are applicable to both.

A variety of circumstances, however, conspire, to prevent its being so effectually accomplished in the garden as in the farm; such as the smallness of the portions of ground generally allotted to this use; the vast number of articles which are to be grown, and their great similarity and relation to each other. The following classification may be considered the most proper:—

Broccoli, cabbage, cauliflower, and savoys;

Common beans, French beans, and peas;

Carrots, beets, and parsnips;

Turnips, early potatoes, onions, leeks, eschalots, &c;

Celery, endive, lettuce, &c, &c;

It is found in practice that celery constitutes an excellent preparation for asparagus, onions and cauliflowers.

Turnips or potatoes are a good preparation for cabbages or greens.

Broccoli or cabbages are a proper preparation for beans or peas.

Cauliflowers prepare well for onions, leeks, or turnips.

Old asparagus land affords a good preparation for potatoes or carrots.

The strawberry, currant, gooseberry, and raspberry, for the same.

Turnips give a suitable preparation for celery or endive; and peas, when well manured, are a good preparation for spinach, &c.

By properly attending to all these different points of management, crops of almost all descriptions may be put into the soil, so as to succeed with much greater certainty, and in a much more perfect manner, than is usual in the ordinary methods of putting them into the ground.—*English Practical Gardener.*

MANURE.

Farmers should make it a point to get as much manure as possible in the ground in the spring. They thus save a great deal that is lost by evaporation when the manure is left in the yard until summer and then carted out into the fields. The decomposition, too, is more gradual in the spring, affording food to the plants according to their increasing wants.

Fattening Hogs.— A writer in the Genesee Farmer, remarking on the article on this subject in the last New England Farmer, by a 'Scientific Farmer,' gives the following directions.

'In the spring as soon as the grass has attained a sufficient growth to afford a good bite, the hogs are let out of the pen and put upon pasture (clover is the best) in which there is plenty of running water, and fed regularly about two quarts of corn meal to each hog, per day—kept well salted, and, occasionally mix with the feed a little sulphur, salt petre, &c, as preventives against disease. About the first of October, they are again shut up and fed high a few weeks upon boiled potatoes and corn, until the weather is cool enough for butchering. Since adopting this method, I have always realized from a hundred to a hundred and fifty pounds more pork with the same expense than I could get from a hog of the same quality (in the spring) treated in the usual manner of pasturing during the summer, and fattening in the fall upon raw corn and cold water.

I have never been able to make hogs grow very rapidly upon grass alone, but with the aid of a little grain they may be made to thrive and grow much faster than one would suppose, who has not tried it; and when fed in such small quantities, while running to grass, they will thoroughly digest it without boiling. There are other advantages derived from fattening hogs during the summer—they are always peaceable and contented; your pork is ready for the fall market, and the trouble is out of the way before cold weather comes on.

Those who keep a dairy, and feed their whey and buttermilk to hogs would find it much to their advantage, I think, to mix with it a little meal, as hogs fatten much faster and easier in warm than cold weather.

LAMPAS OF HORSES.

As the season is now approaching when some people commence one of the most cruel and barbarous of practices ever retained by any people, pretending to be civilized, viz: that of burning out the lampas from the mouths of young horses, we cannot refrain from making a few remarks upon that subject.

We are sensible that some of our most enlightened readers will say, that this article should appear under the head of VULGAR ERRORS; but yet we have what we consider a reasonable excuse for not putting it there.

Most of the articles which have been placed under that head, in our paper, are rather innocent delusions, than partaking of the barbarous; rather superstitious rites and ceremonies, appertaining to property, than any retained usages of the dark ages of barbarity. At what time or with what people this practice originated, we will not pretend to say; but there is one nation who should either discontinue the practice, or else say less on the general diffusion of useful information; that is America.

The idea that the enlargement of that part of the roof of a horse's mouth, is a disease, has long been exploded by all veterinary surgeons. All horses are subject to it, between the ages of three and five, more or less; and in many cases, this soft spongy enlargement, descends to a level with the fore teeth, without marks of tenderness or inflammation indicating disease, and if left to the operation of nature, will disappear, and the horse will have a sound and healthy mouth; not to speak of the danger of bleeding the horse too freely, by opening the palatine artery, the manner of performing the operation, is shocking to the feelings of humanity, as well as painful to the animal. It is uncalled for; and must be considered a piece of wanton cruelty.—*Genesee Farmer.*

Thunder fatal to Goslings.—A writer in the American Farmer says, in a late thunder storm the lightning descended in a field, within less than half a mile of my dwelling, and killed two laborers and laid prostrate and injured three more. But the effect in my fowl yard was very remarkable. I had two broods of goslings, one nearly a week old, on the ground, and another, two days, in a basket in a house. At the instant when the thunder fell, which it did with the most astounding force, the woman who had the care of the fowls, happened to be looking upon those in the basket, and saw them, at once, all fall over upon their backs and expire. Those in the yard, half an hour after, were found dead also; a nest of eggs under a goose, then in progress of hatching, were all killed. You may rely on the correctness of this statement. Though goslings are easily raised, and live more than a century, they seem to be endued with nerves of uncommon sensibility, or to have systems peculiarly favorable to electric impressions.

A French chemist states that potatoes one third boiled, effectually supply the place of soap in washing linen. That their farina is a useful ingredient in starch, has long been known.

Currying Cows.—Cows should be curried as often as horses, particularly when they are shedding their hair. Independent of other consequences, it tends to prevent them from licking themselves, by which they too often swallow the hair, and receive injury.

TREES.

No pains and no reasonable expense should be spared by the farmer in setting out useful and ornamental trees around his house and the public road. He should do this for his own interest and from patriotic feelings. Our fathers made sacrifices for our country with sword in hand. It belongs to their children to make them with the spade. The necessitous calls of our country are so few, that a patriotic spirit is in danger of becoming too quiescent. It should be said of no farmer, in any part of the Union, that he has not patriotism sufficient to set out a tree to ornament his house or the public road. The good of the country requires that a mulberry tree should be planted in every unoccupied corner.

Yellow Locust, Robinia pseudo acacia—Mr Wm. Buckminister of Framingham, encouraged by a premium of fifty dollars, offered by the Massachusetts Agricultural Society, sowed some seed in 1828. He first poured boiling water on them and let them soak three or four days. He then sowed them in his garden.—In the spring following, he transplanted them in worn-out land, in rows eight feet apart and four feet distant in the rows. On an acre he has 1000 trees some of which are four and a half inches in circumference. Many a farmer would add to the value of his farm by following this example.

Prevention of the Mildew on Peach and Nectarine Trees.—The following preventive of the mildew on Peach and Nectarine trees has simplicity, as well as the experience of many years, to recommend it:—Take of sulphur and rain or river water, proportions of two ounces of sulphur to every four gallons of water. Put the quantity which may be required into a copper or boiler, and let it (afterit commences boiling) boil for half an hour: after which it may be taken out, or suffered to remain until it becomes of a tepid state, when it ought to be applied to the trees by means of the garden engine or syringe as in a common washing with water. The time for applying it is annually, as soon as the fruit is set and considered out of danger. —*Loudon.*

Harvesting Oats.—It is much the best way to mow (not to reap) oats when beginning to turn yellow, whether they are wanted for fodder, or for the oats with the fodder. If a farmer wants to make the most of his oats, if they are ever so stout, let him mow them when beginning to turn yellow Dry them well, thresh them as much as he pleases and his cattle will eat the straw in preference to the best meadow hay; and besides the grain will be much brighter and heavier than if they stand in the field till quite ripe, and the straw is spoiled.—*Detroit Courier.*

Exportation of Cattle.—During the first three months of the present year, there have been exported from New Haven to the West India Islands nearly one thousand head of cattle, horses and mules, amounting in value to more than fifty thousand dollars; being a much greater number and amount than was ever before exported from this place in the same length of time.

Chickens destroy Insects.—D. T. recommends, in the Genesee Farmer, as the most effective plan to destroy insects, to put chickens, as soon as they leave the nest, into the garden. The hen is confined under a coop.

NEW ENGLAND FARMER.

BOSTON, WEDNESDAY EVENING, JUNE 1, 1831.

FARMER'S WORK FOR JUNE.

LUCERNE.

We believe that the frequent complaints of the failure of lucerne in this country might be traced to the tenderness of the young plants, and the soil becoming monopolized by weeds for want of thorough culture the first season. Young's Calendar for June, says 'The lucerne drilled in the spring, will now want attendance. It will not be advisable to horse hoe it the first year, because its great tenderness will not bear any accidental evils that may arise in the operation, but the hand hoe should be kept diligently at work; the land kept throughout this month perfectly free from weeds, and the surface well broken by hoes, to prevent any degree of binding. While the men are hoeing they should never omit to stoop and pluck out such weeds with their fingers as grow among the plants in the rows: this is highly necessary; for if they are left they will injure the young lucerne much. Whoever cultivates the grass, must absolutely determine to spare no expense in the eradication of weeds. There is no plant will bear the neighborhood of weeds so badly, and especially while it is young. If the hand hoes are applied in time and often enough, the expense will not be great; but if, through saving, you defer it till they are gotten much ahead, the crop will either be lost, or the expense of clearing enormous.

KILL CATERPILLARS.

It is strange that the owners of orchards should permit caterpillars to overrun their fruit trees, when a little time and attention might rid them of the nuisance. A rag fastened to the end of a long light pole well wet with strong soap suds, and applied to the nest is an approved, cheap and efficient remedy. Care should be taken to attack the insects when they are in their nests, either morning, evening or in cloudy weather.

YOUNG FRUIT TREES.

Sir John Sinclair observes in the Code of Agriculture 'It cannot be too strongly inculcated that to permit young fruit trees to bear fruit too early is to do essential injury to their future fruitfulness and duration.' The fruit should, at least on young trees, be thinned by plucking it carefully by hand, till there is no more left than will be sufficient to serve as a sample of the product of the tree, and show whether it would be desirable to engraft it.

DESTRUCTION OF INSECTS.

In the progress of preparing tobacco for use, a liquid is finally expressed from it, which is very cheap, and highly destructive to animal life. This mixed with from three to five parts of water, is found to be an effectual remedy for the aphis, caterpillars, and other insects of every description.

TAR FOR SHEEP.

We have been assured by a gentleman, who kept a large flock of sheep, that, during the season of grazing he gives his sheep tar at the rate of a gill a day for every twenty sheep. He puts the tar in troughs, sprinkles a little fine salt over it and the sheep consume it with eagerness.

SALT FOR CATTLE AND SHEEP.

All domestic animals, which subsist on green and fresh food require salt. It is recommended to keep it under cover, in such a situation that cattle and sheep may have recourse to it at pleas-

ure. Those cattle, however, which have not been accustomed to so free an use of salt should be brought to it by degrees. We have been informed by a practical farmer that in giving salt to his cattle and sheep, he mixes it with unleached wood ashes, at the rate of one quart of fine salt to one half bushel of ashes. To this composition his cattle and sheep always have access. He thinks it increases the appetite and improves the health of the animals.

COPPERAS WATER FOR SEED CORN.

We have several times adverted to contradictory testimonies relative to the benefits of a solution of copperas for soaking seed corn. We recently conversed with an intelligent farmer, who assures us that he has used the solution for several years and found it a perfect antidote against the *wire-worm*, or *red-worm*, an insect which attacks the seed corn under ground before it vegetates,—That last season, he planted a part of a field with corn prepared with copperas water, but not having enough prepared to finish the piece, a few rows were planted with corn, without any preparation. Most of the latter was destroyed by the wire-worm, but the prepared corn wholly escaped. He says, however, that the solution of copperas is *not a preservative* against the *cut-worm*. This last named insect is an ash coloured worm, with a stripe almost black on its back, which eats off the stem of the young plants of cabbages, cauliflowers, &c. as well as of corn, near the surface of the ground. This gentleman is of opinion that the solution of copperas is a perfect antidote against the *wire-worm*, but of no use against the *cut-worm*; and thus reconciles the apparent contradiction relative to the solution of copperas preserving corn against insects.

DESTRUCTION OF INSECTS.

Forsyth says the leaves of walnut, steeped in boiling water, and that infusion mixed with lime water, soap suds, and urine are found very efficacious for destroying slugs and worms in the ground and insects on trees.

TO PRESERVE INDIAN CORN AND POTATOES AGAINST THE GRUB WORM.

The farmers of Rensselaer county, N. Y. say that ashes or quick lime ought always to be applied to the top of corn hills soon after planting, if it follow sward, to prevent grub larvae from destroying it. The same applications will have a similar effect, if applied to the top of potato hills, but neither unleached ashes nor lime in its quick or caustic state should in any case be allowed to come in contact either with the seed corn, or the young plants.

SOILING

Is a term applied to the practice of cutting herbage crops green for feeding or fattening live stock. On all farms, under correct management, a part of this crop is cut green, for the working horses, often for milk cows, and, in some instances, both for growing and fattening cattle. There can be no doubt of the advantages of this practice, in regard to horses and cows; but for young and for fattening beasts, a sufficient number of experiments are not known to have been yet made with any great degree of accuracy. Young animals require exercise in the open air, and probably will not be found to thrive so well in houses or fold-yards during summer, as in pastures; and though in every case there is a great saving of food, the long woody and comparatively naked stems of the plants, with leaves more or less withered, are perhaps not so valuable in the production of beef or fattening stock as a much smaller weight of herbage taken in by pasturage. Milk cows, however, are so impatient of heat and insects, that this way of feeding them at least for a part of the day, in warm weather, ought to be more generally adopted; and the convenience of having working horses always at hand, besides that they fill their stomachs speedily, is of not less importance than economy. *See Communications to the Board of Agriculture*, vol. vii. *Brown's Treatise or Rural Affairs*, vol. ii. *General Report of Scotland.* vol. ii. *and* iii.

HEATING HOT HOUSES BY STEAM.

We would beg leave to solicit the attention of our readersto the article under the head, of '*Masschusetts Horticultural Society,*' in this day's paper written by S. G. Perkins. Esq. with remarks on the same by Gen. Dearborn. We highly approve of the object, and are happy to perceive the successful results of Mr Perkins' experiment. Having devoted some attention to heating apartments &c, by hot water and steam, we intend as soon as room and leisure will permit to offer some observations on the economy of heat.

Culture of Silk.—We are happy to learn that several public spirited individuals in this vicinity are making exertions to introduce the culture of silk into Massachusetts. One gentleman in Middlesex County intends to have under culture next year one million of white mulbery trees, which will be sold at the bare nominal cost. He has now growing a large number of trees and is making preparations to raise 300,000 this season. Mr D'Homergue of Philadelphia has been consulted on the subject and invited to establish a silk Filature at Lowell, which he is willing to do as soon as cocoons are raised in this quarter in a sufficient degree to justify it. The general introduction of the culture of silk into New England would justly be considered an auspicious era in the agricultural prosperity of the country.

Farmer's Farrier,—illustrating the peculiar nature and characteristics of the Horse, and diseases to which he is liable, with the symptoms and remedies familiarly explained; accompanied with the Pedigree of the blooded horses in the West. With several elegant Engravings. By H. L. Barnum, Editor of the United States Agriculturist, and Farmer's Reporter. Cincinnati, published by A. B. Raff, &c.

The above is copied from the title page of a valuable book lately presented to us by the publisher, after having been bound, gilt and lettered in a beautiful manner. The following extract from the preface of the work will exhibit its object and claims to public patronage in a manner equally concise and perspicuous.

'The most of the publications on Farriery are either too voluminous and expensive, or so abstruse as to render them little better than "*sealed books*" to the majority of those who are most interested in the subject. But few farmers make any pretensions to veterinary surgery, and it cannot be expected that they will understand all the technical terms which genarally characterize publications on Farriery, therefore we have attempted to form a concise, simple and correct treatise, which will be intelligible to any person of common capacity. In compiling it we consulted the most celebrated and skilful farriers, and endeavored to select everything that would be useful to farmers on this subject, and at the same time to expunge all that would not be immediately connected with their interest.

The book appears to us to fulfil the promise conveyed by its preface, and of course is a valuable acquisition to the community, as well as the class of mankind for whose use it is most directly adapted. The following extracts may serve as a specimen.

'The horse is a bold and fiery animal, even in a domestic state: he faces death with ardor and magnanimity: he delights in the tumult of arms and seems to feel the glory of victory; he exults in the chase: his eyes sparkle defiance on the course and his whole air bespeaks spirit and energy. He is nevertheless docile and tractable: he knows how to check and govern the vivacity and fire of his temper. He appears pleased to yield to the hand that guides him, and to consult the inclinations of his master: he in some measure, appears voluntarily to resign his very existence to the pleasure and accommadation of man: his education commences with the loss of liberty and is finished by constraint. Who could endure to see so noble an animal abused? Who conld endure such barbarity? The Arabians consider the horse a valuable present sent them from heaven, and they consider it a religious duty to treat it with that respect which is due to the great Giver of so valuable a gift. Could so much be said for those districts of the world which are termed civilized, and distinguished by the exalted epithet—Christian?

TO PREVENT WORMS OF EVERY DESCRIPTION,

Keep a handful of wood ashes in the bottom of your manger, and salt your horse at least every third day; this will also prevent many other diseases. The ashes will prove destructive to worms, (if any exist,) and is also a gentle cathartic. The nature of the animal requires salt, without which he cannot be fattened, nor his bowels kept in a healthy state.

Tree Pæony.—The Hon. Jonathan Hunewell has sent to the office of the New England Farmer a beautiful specimen of this magnificent plant. It is three feet high, covered with 30 blossoms, some of which are 18 inches in circumference, of a light purple color, intermingled with some paler shades, and of a mild agreeable fragrance, forming a rare combination of spleudor, delicacy, and fragrance. This plant is extensively cultivated iu China, of which they have several varieties, some of which it is said, were formerly sold for 100 ounces of gold. It is there held in such high esteem, as to be called the 'King of Flowers.' Mr Prince of Flushing has specimens in his garden that have produced 50 flowers each, annually.

Roses.—A magnificent show of Scotch Roses, in bloom, is to be seen at Messrs Winships' Brighton Nursery. Of this unique and delicate rose, which is at present so fashionable in Europe, there are about sixty varieties under cultivation at the Brighton nursery. Their collection of other roses comprises upwards of one hundred and fifty choice varieties, which will soon be in bloom.

Horticultural Curiosity.—Mr Emmons has growing in his garden in Eliot Street, a Grape Vine that in November last was covered with fruit in Rochelle, France. It has blossomed well this spring, and gives promise of another fruitful product in Boston.

Scientific Societies.—It is estimated that there are above fifteen hundred learned and scientific societies in the world: above one half of which are occupied in the encouragement of agriculture, manufactures and commerce.

Messrs Editors—Mr Amos Russell, of Deerfield, (Bloody Brook) killed on the first day of March last, five pigs, a few days less than a year old, their exact age not being known, which weighed respectively as follows :—285, 310, 331, 358 and 352 ; making in the whole, 1636 lbs, and including rough fat 1763 lbs. He has since killed another pig *about* thirteen and a half months old, which weighed, as dressed for market, 496 lbs. and including rough fat, 518 lbs.

Mr Russell is a gentleman who would not boast of his agricultural exploits, nor challenge his brother farmers to surpass him : but should you hear of any one equalling him in this particular, you will doubtless make it known to us through the medium of your paper.—*Greenfield pa.*

Cheap Paint.—Mr John C. Pendegrast, painter, of this village, has discovered a material for mixing paints, which promises to be of immense value. It incorporates completely with Linseed Oil, and may be used as a substitute for that costly article. The cost of the new material is comparatively trifling, and abounds in almost every part of the U. States. Paints are mixed and prepared with it, in the same manner as with linseed oil and spirits of turpentine. The most satisfactory experiments have been made. It produces a smoother and harder surface, answers for any color, and is equally impervious to water. The inventor has obtained a patent, and has already disposed of rights to several of the first establishments in this state. He also introduced his paint in Wilmington, and had the pleasure of seeing it used on the public buildings in that city.—*Wayne Sentinel.*

Specimens of the above can be seen at 109 Beekman Street, New York.—*N. Y. Farmer.*

A method of accelerating the maturity of Melons.—This consists in spreading under and around the melons, a bed of pulverized charcoal two inches deep. Lampodias, at Freiheng, attempted this experiment in 1813, and he succeeded in ripening melons in a box filled with earth and not covered during the cold summer of that year. The surface of the charcoal attained a temperature at noon of from 115 to 128 degrees, while elsewhere it was only from 85 to 88 degrees.—*American Farmer.*

Gypsum near the Ocean.—A writer in the Middletown Sentinel living seventeen miles from Long Island Sound, speaks from his own experience since 1796, of the benefit of using Plaster of Paris as a manure, particularly in dry seasons. He finds it answers an excellent purpose for flax, potatoes and grass. He generally puts it on the same land. The farmers on the greater part of this Island do not pay sufficient attention to the cultivation of succulent crops as food for their stock, and with a view of supplying the New York market.

Oyster Bay, April 6, 1831. E. L.

NOTICE.

A stated meeting of the Massachusetts Horticultural Society will be held at the Hall in Joy's buildings, on Saturday next, at 10 o'clock.

Those members who have books belonging to the Library are requested to return them on that date, in conformity to a vote of the Society, passed on the 7th of May. R. L. EMMONS, Secretary.

May 31.

The true Sugar Beet.

For sale at the New England Seed Store, 52, North Market street, Boston, 100 lbs. of the true French Sugar Beet Seed,—received this day from Paris, by the last Havre packet, via Newport. The excellence of this root for cattle, and for culinary and other purposes, is too well known to require comment.

Also—Large and Small Lima Beans—Early Dwarf Beans—several varieties of pickling and other Cucumbers—Radishes, Lettuces, Cabbages, Turnips, &c.

Broom Corn.

Also, just received, a few bushels of prime Broom Corn raised last season in the vicinity of Connecticut river.

Wants a situation,

As Gardener, a married man without children, who understands the management of a garden in all its various branches—hot house, green house, laying out garden ground, &c.

A few lines will be thankfully attended to at this office. June 1.

Sheep—Sheep.

Valuable Books on the best method of forming good flocks, of increasing them, and treating them properly when in health and when diseased—on the character and value of Merino Sheep—anatomical structure, &c, &c—5 valuable works, viz :

Sir George Stewart Makenzie, Bart.
Robert R. Livingston, LL. D.
Samuel Bard, M. D.
M. Daubenton, a man of letters, and profound Naturalist ; his work was published in Germany, Italy, Spain, and America—and *in France*, at the expense of the nation.
Mr Tessiu, inspector of the Rambouillet Establishment—and others in France.

Also for sale—a valuable collection of Books on Agriculture, Manures, various treatises on Horses, Cattle, Botany, &c, &c. By R. P. & C. WILLIAMS, wholesale and retail Booksellers and Stationers, No. 18 and 20 Cornhill, Boston. May 25.

Library of Entertaining Knowledge,

Under the direction of the Society for the Diffusion of Useful Knowledge.

Now publishing by Lilly & Wait, (late Wells & Lilly,) rear of Boylston market, and by Carter, Hendee & Babcock, Washington street, Boston.

The parts of this interesting work which treat upon Timber Trees, and on Fruits, give much useful and curious information on these subjects,—and are valuable to the farmer not only for the facts, that are collected with great research and judgment, but for the interesting manner in which they are combined and narrated—leading the old and the young to regard their daily occupation, not alone as a laborious means of gaining a livelihood, but as an amusement, and a science.

The parts upon Insect Architecture and Transformation will prove unusually interesting.—Interesting to all ; but to the Agriculturist particularly useful, in enabling him to understand the origin and the character of such insects as may be made subservient to the uses of man, as well as of that numerous tribe that often blight the expected harvest, and nip his promised fruits in the green tree and in the bud.

There is scarcely a subject already treated upon, or that has been announced in this beautiful series, that is not calculated to prove interesting to the farmer. Not the farmer alone, but the mechanic, and the scholar, will find it in the highest degree useful and interesting. It is a treasure to the man of science, without proving a stumbling-block to the unlearned.

Each part contains more than 200 pages, and numerous engravings on wood, beautifully executed.—Price *forty* cents a part, and continued on the same terms.

Societies for the diffusion of useful knowledge, schools and seminaries, supplied on the most favorable terms.

☞Twelve numbers of the American edition are now published, and several others which are equally beautiful and interesting, now in press, and will appear in speedy succession. May 25.

Yellow Locust Seed.

Just received and for sale at the Seed Store connected with the New England Farmer Office, No. 52 North Market Street,

A few lbs. genuine Yellow Locust Seed, *(Robinia pseudoacacia)* saved near Harrisburg, Pa. expressly for this Establishment. The excellence of this tree for ship timber and fences, its rapid growth, and its beneficial effects on sandy, barren plains, where it thrives well, are too well known to require comment.

Wrought-Iron Ploughs.—Bar-Iron, &c.

Wrought-Iron Ploughs, of all sizes.—*Also*, A Complete assortment of American, English, Swedes and Russia Bar Iron—American Braziers' Rods—Spike and Nail Rods, Shoe-Shapes—Hoop and Band Iron—Steel of all kinds—Pipe-box and Mould-board plates, &c. constantly for sale by GAY & BIRD,
6tis. No. 44, India Street, Boston.

Wm. F. Otis & Co.

No. 110, Faneuil Hall Market, have a good supply of Carnation Pink roots, Pine Apples, and fine West India Squashes, from Trinidad de Cuba. May 18.

Potatoes for Seed.

For sale at the New England Seed Store, No. 52 North Market Street—

A few bushels of the fine seedling potatoes mentioned by the editor of the New England Farmer, vol. viii, p. 102. This is but the fifth year from the ball ; they have twice taken the premium from the Essex Agricultural Society. (See Colonel Pickering's Report, N. E. Farmer, vol. vi. page 98) They are represented by the person who raised them, as tolerably early, more than middling bearers, remarkably delicate and mealy, size nearly round, color white, and have but very few protuberances. A good opportunity now offers to farmers to secure a superior variety of this important vegetable for seed. Price $1 per bushel. May 18.

Bones Wanted.

Shin and Leg Bones constantly purchased by GEO. H. GRAY & CO. No. 68 Kilby street.
April 20. 2mos

Bees in Cities.

AN ESSAY on the practicability of cultivating the *Honey Bee*, in maritime Towns and Cities, as a source of Domestic Economy and Profit. By Jerome V. C. Smith, M. D. Just published by Perkins & Marvin, 114, Washington Street, and for sale by J. B. Russell, at the Agricultural Warehouse, No. 52 North Market street, price 38 cents.

For Sale, Full blood Aldnerney and Short Horn Bull and Heifer Calves.

Two Alderney Bull Calves, and one Heifer Calf. Also, one Bull and two Heifer Calves of the Short Horn or Teeswater breed, all from full blood imported stock, on both sides. For terms apply at this office. 4t May 11.

Lead Pipe.

LEAD PIPE, all sizes, constantly for sale by Lincoln Fearing & Co, No. 110, State Street.
April 13, 1831. 6w.

Brighton Market—*Monday, May* 30.

[Reported for the Chronicle and Patriot.]

At Market this day 304 Beef Cattle, 10 pair Working Oxen, 31 Cows and Calves, 601 Sheep and Lambs. Unsold at the close of the market about 90 Beef Cattle, exclusive of 70 which are left within a few miles of the market.

Prices.—*Beef Cattle*—The extreme warm weather, and the large number of Cattle at market, produced a 'glut.' Sales were slow and uneven, and at a reduction of about 50 cts. per hundred, taking all together. We shall quote from 4 75 to 5 75, extra at 6.

Working Oxen—No sales noticed.

Cows and Calves—We noticed several sales as low as $12, also several at about $30, and a number at intermediate prices.

Sheep and Lambs—We noticed a number of lots, the sales of which averaged about $2 ; one or two lots, quality poor, several shillings less ; also extra at 2 25 a 2 33 ; one lot of wethers, sheared, at 2 50, one at 3 and one at 3 50.

Swine—None.

New-York Cattle Market, May 23.—At Market this day from 3 to 400 Beef Cattle, several lots Sheep and Lambs, number not ascertained ; a few lots Swine, and 30 to 40 Milch Cows. Demand for Beef good, nearly all sold, but prices somewhat reduced ; the quantity, however, was observed to be a little inferior to those of former sales ; a few lots extra, taken at 7 50, several good, at $7, fair $6 a 6 50, middling 5½ a 5¾, and a few prime pairs at $8 per cwt. Sheep, market fair, and all sold, extra, $5 a 5½, good 3½ g 4, fair 2½ a 2¾, and ordinary at $1½ a 2 each. Lambs in great demand, and bring $2 a 2 50 per head. Swine, quality, rather inferior, being still fattened, 4, 4½ a 4¾ c. Milch Cows, dull at $22 50, 25, 28, and 30.

MISCELLANY.

THE FALSE ONE.

BY T. H. BAILEY.

I knew him not, I sought him not—
He was my father's guest;
I gave him not one smile more kind
Than those I gave the rest:
He sat beside me at the board,
The choice was not my own,
But oh! I never heard a voice
With half so sweet a tone.

And at the dance again we met—
Again I was his choice—
Again I heard the gentle tone
Of that beguiling voice:
I sought him not—he led me forth
From all the fairest there,
And told me he had never seen
A face he thought so fair.

Ah! wherefore did he tell me this?
His praises made me vain;
And, when he left me, how I longed
To hear that voice again!
I wondered why my old pursuits
Had lost their wonted charm,
And why the path was dull, unless
I leaned upon his arm.

Alas! I might have guessed the cause—
For what could make me shun
My parent's cheerful dwelling place
To wander all alone?
And what could make me braid my hair,
And study to improve
The form that he had deigned to praise—
What could it be but love?

Oh! little knew I of the world,
And less of man's career;
I thought each smile was kindly meant—
Each word of praise sincere:
His sweet voice spoke of endless love—
I listened and believed,
And little dreamed how oft before
That sweet voice had deceived.

He smiles upon another now—
And in the same sweet tone
He breathes to her those winning words
I once thought all my own;
Oh! why is she so beautiful?
I cannot blame his choice—
Nor can I doubt she will be won
By that beguiling voice.

Providential escape of Gen. Mina.—During the last ill-fated attempt of the constitutionalists upon the Spanish frontier, Mina, in order to detach the attention of the enemy from his flying friends, with two of his officers, attempted to retreat by another route, which, from being on horseback, they hoped to accomplish with the greater facility. They were, however, disappointed; for the woods and defiles through which they had to pass were so close and intricate, that they were at length obliged to destroy their horses; and at the moment they were about to sink under excessive fatigue, they providentially discovered a cave, in which they took shelter. The enemy having discovered the dead horses, naturally conceived from their having been recently killed, that their prey could not be very distant, they continued their search as long as daylight allowed them, but, happily for the fugitives, fruitlessly. Several bloodhounds were then procured; but who will deny the interposition of Divine Providence, when it is stated that at this moment of extreme peril two wild deer, animals rarely if ever met with in Spain out of the royal preserves, started up, and the dogs so ardently pursued them that no efforts could draw them off.

The merciless wretches then procured torches; but the utmost exertions of feeble men are unavailing when opposed to the all-protecting power of Omnipotency; and thus the fugitives escaped their otherwise but too certain fate.

EFFECT OF CLIMATE.—The human race is naturally the inhabitant of a warm climate, and the paradise described as Adam's first abode, may be said still to exist over vast regions about the equator.—There the sun's influence is strong and uniform, producing a rich and warm garden, in which human beings, however ignorant of the world which they had come to inhabit, would have their necessities supplied almost by wishing. The ripe fruit is there always hanging from the branches; of clothing there is required only what moral feelings may dictate, or what may be supposed to add grace to the form; and as a shelter from the weather, a few broad leaves spread on connected reeds will complete an Indian hut. The human family, in multiplying and spreading in all directions from such a centre, would find, to the east and west, only the lengthened paradise, with slightly varying features of beauty; but to the north and south, the changes of season, which make the bee of high latitudes lay up its winter store of honey, and sends migrating birds from country to country in search of warmth and food, would also rouse man's energies to protect himself. His faculties of foresight and contrivance would come into play, awakening industry; and, as to their fruits, he would soon possess the knowledge and the arts which secure a happy existence in all climates, from equator almost to the pole. It is chiefly because man has learned to produce at will, and to control, the wonder-working principle of heat, that in the rude winter, which seems the death of nature, he, and other tropical animals and plants which he protects, do not in reality perish—even as a canary bird escaped from its cage, or an infant exposed among the snowhills. By producing heat from his fire, he obtains a novel and most pleasurable sort of existence; and in the night while the dark and freezing winds are howling over his roof, he basks in the presence of his mimic sun, surrounded by his friends and all the delights of society, while in his store rooms, or in those of merchants at his command, he has the treasured delicacies of every season and clime. He soon becomes aware, too, that the dreary winter, instead of being a curse, is really in many respects a blessing, by arousing from the apathy to which the eternal serenity of a tropical sky so much disposes. In climates where labor and ingenuity must precede enjoyment, every faculty of mind and body is invigorated; and hence the sterner climates form the perfect man. It is in them that the arts and sciences have reached their present advancement, and that the brightest examples have appeared of intellectual and moral excellence.—*Arnott's Physics.*

MOSTACHES.—There is no civilized animal that looks respectable in Mustaches, but grimalkin. To her they are quite becoming, for they suggest at once ideas of use and fitness. But a man in mustaches—a human being with purrers—is an object supremely ridiculous. If they are of no use to him—and of this there can be no doubt—do they add anything to his beauty? To an officer, military or naval, they may, but not to a citizen, not to a boy whose cheeks are hardly razorable. Young gentlemen who cultivate mustaches are like boys when first inbreeched; they strut about and fancy themselves men; but no one but themselves is cheated in the belief of it.

[He must have been a bold fellow who indited the above, for if known, there is but little doubt that like Absalom he would fall a victim to hair. In England the rage for whiskers and mustaches is so great, that the office of barber has become a sinecure—that ancient profession receiving now the same recompense for thinning the hairy crops in the corners of a man's mouth, as they did formerly for denuding the whole face of the excrescence. Shakspeare says, something about 'the more hair the less wit;' but he being as lightly bearded as a spear of wheat, and bald withal, is not so good authority upon this subject as some others, and cannot therefore be quoted as giving to 'h-airy nothings a local habitation and a name.']—*N. Y. American.*

Valuable and Cheap Land—for Sale.

The subscriber offers for sale, 14,000 acres of choice Land, situated in the town of Pinckney, county of Lewis and state of New York. Some of the land is improved and under cultivation. The country is remarkably healthy, being entirely free from the fever and ague and from the common bilious fevers which often afflict the towns upon Lake Ontario, this town being 18 miles east of the lake. The soil is principally a sandy loam, much of it covered with rich black mould. The timber is chiefly Sugar Maple, Black Ash, Butternut, Beech, Elm, &c. The land yields first rate crops of Grass, Rye, Oats, Barley, Potatoes and Flax; and on some lots, good Wheat and Corn may be grown. To those wishing to obtain superior grazing farms, a fine opportunity now offers itself. The produce of pasturage and hay from an acre of this land, is very large, fully equalling if not surpassing that from the same quantity of land in any other of the Black River townships. The land is admirably well watered, there being but few lots which have not durable running streams upon them. The land is well adapted to Orcharding—the Apple tree thriving very well in this county. Stock of all kinds may be disposed of with the least possible trouble, and to the greatest advantage, the drovers purchasing at the very doors of the farmers, and paying the highest cash prices for their cattle, which will readily find purchasers at all seasons of the year. Several farmers at present residing on this town, were originally from the New England States, and some of them from Massachusetts, who are in thriving circumstances. The above described land is offered for sale at the very low price of from two dollars and a half to three dollars per acre, for the uncleared land, and from three dollars and a half to five dollars and a half for the improved lots. The land will be sold in lots to suit purchasers, and from two to five years' credit for payment in annual instalments, will be given. As a further convenience to purchasers, the subscriber will receive in payment, Cattle, Sheep, Pork, Grain or Grass Seed, for which products he will allow the highest cash prices. The title to the land is indisputable, and good Warranty Deeds will be given to purchasers. Persons desirous of purchasing will please to apply to the subscriber, at Henderson Harbor, county of Jefferson, State of New York, or to DAVID CANFIELD, Esq. on the town. JAMES H. HENDERSON.

March 9. ep16t

Ammunition

Of the *best* quality and *lowest prices*, for sporting—constantly for sale at COPELAND'S POWDER STORE, 63 Broad Street.

N. B. If the quality is not found satisfactory, it may be returned, and the money will be refunded. tf Jan. 7

Hickory.

This astonishing fleet horse was raised in Montreal, is from an English blood mare, (sire unknown,) is not inferior to any in the U. States for speed, action and beauty. He is a fine sorrel, well built, good size, and pronounced by (*good*) judges in every respect a first rate horse; trots a 3 minute gait, fast walker, and has paced around the trotting course, Long Island, in 2 minutes, 34 seconds, and was offered publicly to match against any horse that could be produced. It is considered unnecessary to say more, as his qualifications are too well known to be doubted.

He will stand at Abbott's Inn, Holden, during the season. Terms $8, the season. 6t May 11.

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